
Climategate: the unravelling and its consequences

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THE Climategate affair is enormous, and throughout I have needed to keep my focus on a few key questions. These are reflected here; and in the interests of brevity I have pared them down to the minimum. What I say may be shocking to some; everything here is tentative and for discussion.

The War on Carbon

I argue that the 'global warming' campaign can be best understood as yet another of the Wars that have characterised politics in recent years. We already have the War on (non-alcoholic) Drugs, which is ruining a large country on the Southern border of the U.S.A. More recently came the War on Terror, which currently has the U.S.A. mired in 'the graveyard of empires'. In the background is the War on Socialism, which led to the hubris of markets that caused the near-meltdown of the world's financial system. And now the evil empire of choice is Carbon, intended to be vanquished by an infinitely corruptible system of bureaucratically defined payments for non-existent actions.

In a familiar fashion, Carbon has been set up to function as a proxy for the real, complex problems of sustainability and survival. The environmental movement has been recruited, or perhaps recuperated, to this campaign, and will suffer accordingly. And to the extent that Science has been enlisted in this current War, it will be implicated and besmirched. It is quite possible that the public will soon lose interest in the details of the scientific debate. But having created the War on Carbon as a hegemonic moral campaign, the authorities cannot simply let it wither away. If it is discredited, and all the various imperatives fall into confusion, then disillusion and resentment will ensue, among the public and within the broader scientific community as well. An early indication of this development is the submission by the Institute of Physics to Parliament, calling for a 'wider inquiry into the integrity of the scientific process in this field.'¹

Different claims, different sorts of science

First, there is 'climate science', done by many researchers, who (as I have seen) cope skilfully with the severe inherent uncertainties in data and models. They develop tentative theories about the complex processes being studied, and are cautious in generalising. But they operate in a politicised context where 'global warming' is the keyword, and where results contributing to the War on Carbon are desired by funders. A very much smaller set of scientists have done what I call 'Carbon-based anthropogenic global-warming (CAGW) science'. The great difference between the two sorts of science can be seen in the adherence to the principles of openness to criticism, and in the management of uncertainty. By Phil Jones's admission, the latter sort of science was evident in the

e-mail exchanges.

Their task was difficult, since they needed to establish trends with the following properties: rapid warming is very recent, and consequent on industrialisation; it is not amenable to explanation in terms of natural cycles or other agents; it is close to a tipping point to catastrophe; and its regional effects can be estimated. Total proof is not required, of course; but strong evidence is. The establishment of any of the points above has been fraught with difficulties.

As a sample of the problems of CAGW science, it was necessary to flatten out the (rather patchy) historical records of a medieval warm period, along with the stronger evidence of a subsequent 'little ice age'. This was known to be followed by a warming phase starting in the early nineteenth century (when many glaciers started to retreat). This flattened pattern is the 'hockey stick', which is critical for at least the popularised version of the CAGW science of the War on Carbon. The removal of the medieval warm period was accomplished by the use of tree-ring data that has been sharply criticised. But recent tree-ring data showed a decline in temperatures since 1961. And so in the published graphs, those inherently more reliable data were deleted, and in their place were substituted averaged temperature data. This notorious 'Nature trick' is indicative of the approach of the CAGW scientists.

In retrospect, it seems that there was a sort of 'bootstrapping of plausibility' of the core CAGW science team and the International Panel on Climate Change (IPCC). By remaining in ignorance of the many legitimate scientific criticisms, the leading scientists, and then with them the politicians and the general public, were carried along in the message of alarm, and of the necessity for the War on Carbon. Now that the CAGW science has unravelled (recently with the assistance of Phil Jones himself), there needs to be clarity about what is left intact as the scientific base for the War on Carbon. Generalised mentions of the thousands of scientists working on climate change will not restore plausibility to that core CAGW science.

The perils of arrogance of authority

It seems that the greatest peril of having a position of authority is to believe that one is in unique command of truth and virtue. Critics are enemies, threatening the natural order of things with subversion and anarchy. Because we in authority think we ought to know something, we therefore must know it. Above all, there must never be sent a 'wrong' message, i.e. the message that we got it wrong. So long as the public acquiesces, the approach is successful. But when doubts are raised, the very appearance of arrogance destroys trust; 'if they don't respect us why should we respect them?' becomes the attitude. Attempts to stop the rot are futile, as the ruling maxim becomes, 'don't believe it until it's been officially denied'. The final defence of arrogance is

'you should start to trust us now!', to which the natural response is 'why?'

We have seen this process in a variety of institutions, as in the current UK government's policies of concealment and spin of all information including science, along with Parliament in the UK and the world financial system. Up to now Science has survived crises of confidence essentially unscathed. If, as now seems quite possible to me, the public not only comes to reject the War on Carbon but also the science that is proclaimed as its base, then the question of 'who knew what when?' among the politicians and scientists may come to the fore. Cover-up of malfeasance is considered to be morally at least as bad as the original act, and for that accusation the only defence is a strong proof of non-culpable ignorance. Arrogance and cover-up are already all too familiar in English public life; science can do without them.

Citizens' assessment of debates

One of the great practical issues of our time is enabling citizens to assess scientific debates. Since the course of such debates usually seems to hinge on technicalities, how can the mere citizen judge? The problem is not confined to science; after all, juries must cope with very unfamiliar sorts of evidence and arguments. In that context a strong principle (which does not prevent error, of course) is to observe 'the demeanour of the witness'. Someone, particularly an expert, who comes over as arrogant, will on that account be trusted less. In the present case, those who denigrate opponents and use personal arguments against them may give good heart to their supporters, but they risk forfeiting the trust of the uncommitted. In addition, I can offer two related heuristics, one from history and the other from philosophy.

The eminent historian Professor Hugh Trevor-Roper (later Lord Dacre) found himself in the unlikely position of joining American radicals in doubting the official version of the J.F.K. Kennedy assassination. As he explained to me, he studied the lengthy Warren Commission report, and decided to test it. As an historian, he knew that such a thesis can only rarely be subject to a simple refutation. The structure of evidence and argument is too complex and involuted to permit that. However, as he said to me, if every time you press that structure somewhere, your thumb goes through, you are eventually justified in withdrawing your assent. This has been the experience of many people, including myself, on the CAGW science.

The distinguished philosopher Imre Lakatos was concerned to provide a rationale for 'theory choice' in science, once it was accepted that there is no simple logic either of discovery or of refutation. So he imagined a dynamic process, not of single theories but of 'research programmes'. In that, there is a sort of jousting between programmes. If one discovers novel facts in response to challenges, while the other retreats, then they are assessed as 'progressive' and 'degenerate' respectively. Of course, the tables may eventually be turned; but that is all that the observers, or indeed the participants, have to go on at any time.

In the present case it is not so much discoveries as mutual accusations of low-quality research. Work is now underway on assessing the detailed claims of systematic manipulation of temperature data, so the jury is still out on that one. But revelations about the behaviour

of the CAGW scientists, together with the significantly biased errors in the IPCC reports and the behaviour of its Chair, Dr Pachauri, put the War on Carbon advocates most definitely on the defensive. It may yet prove to be not a total unravelling, but that is how it stands now.

The blogosphere and the new politics of scientific knowledge

Although the liberal mainstream media still regard the blogosphere as mainly a nuisance, it has been critical in the development of this debate. The contents of the leaked emails were originally dismissed as merely injudicious private remarks by harassed scientists. But thanks to a prior large-scale cooperative effort on the blogosphere, materials were immediately available to explain their meaning, and to establish that they were evidence of serious lapses in good scientific practice.

In the absence of the blogosphere, previous critics of an official science policy could be marginalised and neutralised, as during the scandal of BSE. The power of the Internet in the advancement of democracy has now reached science policy. I have interpreted this development as the provision of a technological base for the Extended Peer Community that operates in situations of 'Post-Normal Science'. My earliest writing on Climategate was posted on <http://www.wattsupwiththat.com>, which itself is a demonstration that free discussion can be constructive while vigorous, and can also attract a great multitude of readers. Science and its media would do well to approach the blogosphere with greater respect.

Summary

Perhaps the most important element just now is the continued insistence by political leaders, backed by most scientific leaders, that the debate is over and that critics, still denigrated as 'deniers', are intellectually and morally defective, in spite of all the signs of an unravelling of global-warming science. But the uncertainties about the climate are really there and decisions must be made in recognition, not denial, of those uncertainties. If the credibility of the various leaders' claims to unique certainty and virtue is destroyed, then their authority will, to a lesser or greater extent, be compromised. How that will play out, remains to be seen.

(My thanks to Peter Taylor, of the Department of Philosophy at Oxford, for his usual incisive comments)

¹ (<http://www.publications.parliament.uk/pa/cm200910/cmselect/cmsctech/memo/climatedata/uc3902.htm>)